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**Reporting Title:** ESR1 Mutations Analysis, Tumor**Performing Location:** Mayo Clinic Laboratories - Rochester Main Campus**Ordering Guidance:**

Multiple oncology (cancer) gene panels are available. For more information see [Hematology, Oncology, and Hereditary Test Selection Guide](#).

**Necessary Information:**

**A pathology report** (final or preliminary), at minimum containing the following information, **must accompany specimen for testing to be performed:**

1. Patient name
2. Block number-must be on all blocks, slides, and paperwork (can be handwritten on the paperwork)
3. Tissue collection date
4. Source of the tissue

**Specimen Requirements:**

**This assay requires at least 20% tumor nuclei.**

NOTE: Submit tissue from either local recurrence or metastatic disease collected after endocrine therapy has been administered (see Clinical Information for more details).

-Preferred amount of tumor area with sufficient percent tumor nuclei: tissue 216 mm<sup>2</sup>)

-Minimum amount of tumor area: tissue 36 mm<sup>2</sup>)

-These amounts are cumulative over up to 10 unstained slides and must have adequate percent tumor nuclei.

-Tissue fixation: 10% neutral buffered formalin, not decalcified

-For specimen preparation guidance, see [Tissue Requirement for Solid Tumor Next-Generation Sequencing](#). In this document, the sizes are given as 4 mm x 4 mm x 10 slides as preferred: approximate/equivalent to 144 mm<sup>2</sup>) and the minimum as 3 mm x 1 mm x 10 slides: approximate/equivalent to 36 mm<sup>2</sup>).

**Preferred:** Submit 3, if available, or 2 of the following specimens.

**Acceptable:** Submit **at least one** of the following specimens.

**Specimen Type:** Tissue block

**Collection Instructions:** Submit a formalin-fixed, paraffin-embedded tissue block with acceptable amount of tumor tissue.

**Specimen Type:** Tissue slide

**Slides:** 1 Hematoxylin and eosin-stained and 10 unstained

**Collection Instructions:**

Submit the followings slides:

1 Slide stained with hematoxylin and eosin

AND

10 Unstained, nonbaked slides with 5-micron thick sections of the tumor tissue.

**Note:** The total amount of required tumor nuclei can be obtained by scraping up to 10 slides from the same block.

**Additional Information:** Unused unstained slides will not be returned.

**Specimen Type:** Cytology slide (direct smears or ThinPrep)

**Slides:** 1 to 3 Slides

**Collection Instructions:** Submit 1 to 3 slides stained and coverslipped with a total of 5000 nucleated cells (preferred) or at least 3000 nucleated cells (minimum).

**Note:** Glass coverslips are preferred; plastic coverslips are acceptable but will result in longer turnaround times.

**Additional Information:** Cytology slides will not be returned. An image of the slides will be stored per regulatory requirements.

**Forms:**

If not ordering electronically, complete, print, and send an [Oncology Test Request](#) (T729) with the specimen.

Specimen Type	Temperature	Time	Special Container
Varies	Ambient (preferred)		
	Refrigerated		

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
617929	Result	Alphanumeric		82939-0
617930	Interpretation	Alphanumeric		69047-9
617931	Additional Information	Alphanumeric		48767-8
617932	Specimen	Alphanumeric		31208-2
617933	Tissue ID	Alphanumeric		80398-1
617934	Method	Alphanumeric		85069-3
617935	Disclaimer	Alphanumeric		62364-5
617936	Released By	Alphanumeric		18771-6

LOINC® and CPT codes are provided by the performing laboratory.

**Supplemental Report:**

No

**CPT Code Information:**

88381 - Microdissection, manual

81479

**Reflex Tests:**

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
SLIRV	Slide Review in MG	1	88381	Yes	No, (Bill Only)

**Reference Values:**

## **Test Definition: ESR1T**

ESR1 Mutation Analysis, Next-Generation  
Sequencing, Tumor

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An interpretive report will be provided.